

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A resin-coated sand comprising:
a refractory granular aggregate, and
a coating layer, ~~which is formed~~ on the surface of the granular aggregate,
~~obtained by coating with~~ formed of a thermosetting resin and a thermoplastic resin,
wherein the thermoplastic resin is at least one of polyethylene, polypropylene,
polyethylene glycol, polyamide, polymethyl methacrylate and polystyrene; and
wherein the thermoplastic resin can be at least partially removed from the
resin-coated sand by heating the resin-coated sand at 200°C for 1 to 7 hours.
2. (Currently amended) The resin-coated sand according to claim 1,
wherein the coating layer is formed by of a layer of thermosetting resin coating the surface
of the granular aggregate ~~with the thermosetting resin and further coating with the~~ a layer
of thermoplastic resin coating the thermosetting resin layer.
3. (Currently amended) The resin-coated sand according to claim 2,
wherein the coating layer ~~comprises~~ consists essentially of:
a layer of a cured thermosetting resin ~~layer containing the thermosetting~~
~~resin, with which~~ coating the surface of the granular aggregate ~~is coated, and~~
a layer of thermoplastic resin ~~layer containing the thermoplastic resin, with~~
~~which~~ coating the surface of the cured thermosetting resin layer ~~is coated.~~
- 4.&5. Cancelled.
6. (Currently amended) The resin-coated sand according to claim 1 or
2, wherein the amount of the thermoplastic resin ~~added~~ is from 0.01 to 1.0 parts by mass
with respect to 100 parts by mass of the granular aggregate.

7. Cancelled.

8. (Original) The resin-coated sand according to claim 1 or 2, wherein a particle size of the granular aggregate is not less than 10 μm and not more than 300 μm .

9. (Original) The resin-coated sand according to claim 1 or 2, wherein the thermosetting resin is at least one of phenolic resin, melamine resin and urea resin.

10. (Original) The resin-coated sand according to claim 1 or 2, wherein a softening point of the thermosetting resin is not lower than 70°C and not higher than 130°C.

11. (Currently amended) The resin-coated sand according to claim 1 or 2, wherein the amount of thermosetting resin ~~added~~ is from 1.0 to 4.0 parts by mass with respect to 100 parts by mass of the granular aggregate.

12. (Previously presented) The resin-coated sand according to claim 1 or 2, wherein the thermoplastic resin has a mass-average molecular weight (relative to polystyrene standards) as measured by gel permeation chromatography within a range from 2,000 to 10,000.

13. (Currently amended) The resin-coated sand according to claim 1 or 2, further comprising calcium stearate added to the sand as a flow improver.

14. (Currently amended) The resin-coated sand according to claim 1 or 2, further comprising metal powder, ~~wherein a metal of the metal powder is~~ of at least one of iron, copper, zinc, aluminum and nickel added to the sand.

15. (Currently amended) The resin-coated sand according to claim 1 or 2, further comprising a metal oxide powder, ~~wherein a metal of the metal powder is of~~ at least one of iron, copper, zinc, aluminum, nickel, cobalt and titanium added to the sand.

16. (Currently amended) The resin-coated sand according to claim 1 or 2, further comprising as a silane coupling agent at least one of aminosilane and epoxysilane added to the sand.

17. (Currently amended) A resin-coated sand comprising:
a refractory granular aggregate; and
a coating ~~layer~~ formed on the surface of the granular aggregate,
wherein the coating ~~layer~~ consists essentially of a layer of thermosetting resin ~~layer-coating formed on an the~~ outer surface of the granular aggregate and a layer of thermoplastic resin ~~layer-coating formed of~~ at least one of polyethylene, polypropylene, polyethylene glycol, polyamide, polymethyl methacrylate and polystyrene coated on an outer surface of the thermosetting resin layer.

18. (New) A method for forming a mold in an RP system by laminate shaping comprising the steps of:
providing a refractory granular aggregate;
coating the surface of the granular aggregate with a thermosetting resin and a thermoplastic resin;
spreading the resin-coated sand over a platform;
irradiating at least a portion of the resin-coated sand on the platform with a laser, and
heating the irradiating resin-coated sand at 170 to 250°C for 1 to 7 hours to at least partially remove the thermoplastic resin.

19. (New) The method according to claim 18, wherein the coating step comprises first coating the surface of the granular aggregate with the thermosetting resin and then coating the thermosetting resin with the thermoplastic resin.

20. (New) The method according to claim 19, wherein the coating step comprises:

coating the surface of the granular aggregate with a thermosetting resin layer;
curing the layer of thermosetting resin; and
coating the surface of the thermosetting resin layer with a layer of the thermoplastic resin.

21. (New) The method according to claims 18 or 19, wherein the thermoplastic resin is at least one of polyethylene, polypropylene, polyethylene glycol, polyamide, polymethyl methacrylate and polystyrene.

22. (New) The method according to claims 18 or 19, wherein the amount of the thermoplastic resin is from 0.01 to 1.0 parts by mass with respect to 100 parts by mass of the granular aggregate.

23. (New) The method according to claims 18 or 19, wherein a particle size of the granular aggregate is not less than 10 μm and not more than 300 μm .

24. (New) The method according to claims 18 or 19, wherein the thermosetting resin is at least one of phenolic resin, melamine resin and urea resin.

25. (New) The method according to claims 18 or 19, wherein a softening point of the thermosetting resin is not lower than 70°C and not higher than 130°C.
26. (New) The method according to claims 18 or 19, wherein the amount of thermosetting resin is from 1.0 to 4.0 parts by mass with respect to 100 parts by mass of the granular aggregate.
27. (New) The method according to claims 18 or 19, wherein the thermoplastic resin has a mass-average molecular weight (relative to polystyrene standards) as measured by gel permeation chromatography within a range from 2,000 to 10,000.
28. (New) The method according to claims 18 or 19, further comprising adding calcium stearate to the resin-coated sand as a flow improver.
29. (New) The method according to claims 18 or 19, further comprising adding a metal powder of at least one of iron, copper, zinc, aluminum and nickel to the resin-coated sand.
30. (New) The method according to claims 18 or 19, further comprising adding metal oxide of at least one of iron, copper, zinc, aluminum, nickel, cobalt and titanium to the resin-coated sand.
31. (New) The method according to claims 18 or 19, further comprising adding a silane coupling agent of at least one of aminosilane and epoxysilane to the resin-coated sand.